CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT 1
2015
PRIMARY FIVE

SCIENCE

BOOKLET A

Name: _____ ( )

Class: Primary 5 - _____

Date: 15 May 2015

30 questions

60 marks

Total Time for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS) provided.

This booklet consists of 18 printed pages, excluding the cover page.

Booklet A (30 × 2 marks)

For each question from 1 to 30, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet. (60 marks)

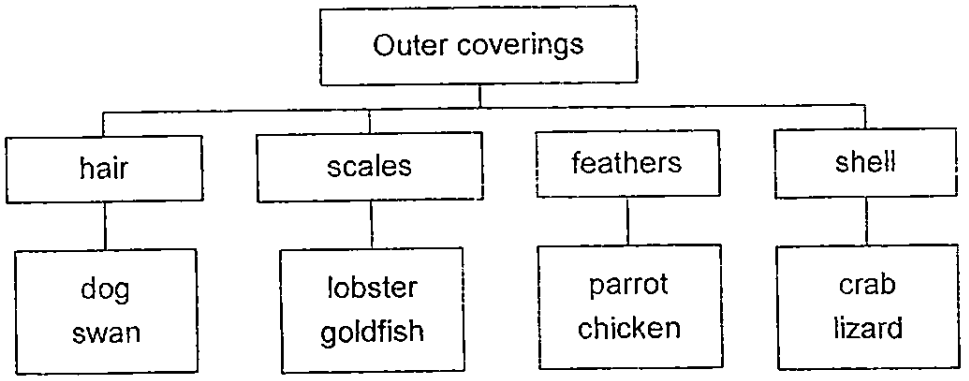
1 Nina wants to find out if an animal needs water to survive. A tick (✓) in the table below indicates that the condition is present in the set-up.

Conditions	Set-up			
	A	B	C	D
Air	✓	✓		✓
Water	✓		✓	
Food	✓		✓	✓

Which two set-ups should she use?

1) A and B only
2) A and D only
3) B and C only
4) B and D only

2 The classification chart below shows the outer coverings of some animals.



How many animals have been classified wrongly?

1) 1
2) 2
3) 3
4) 4

3 The diagram below shows a boy jogging.

Which of the boy's body systems is/are at work when he is jogging?

A Skeletal system

B Muscular system

C Circulatory system

D Respiratory system

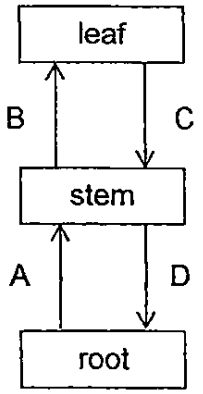
(1) A only

(2) B and C only

(3) B, C and D only

(4) A, B, C and D

4 The diagram below shows the different parts of a plant. The arrows A, B, C and D represent the water-carrying and food-carrying tubes.



Which one of the following best represents the substances that pass through tubes A, B, C and D?

	A	B	C	D
(1)	water	food	water	food
(2)	food	food	water	water
(3)	water	water	food	food
(4)	food	water	water	food

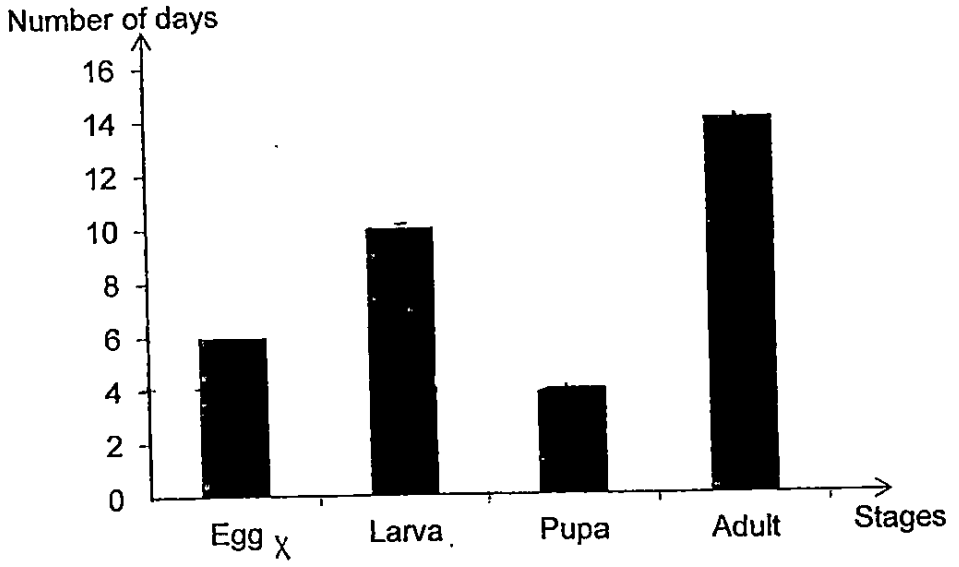
5 The following statements describe the stages of growth of a seedling.

A Green leaves appear.
B The seed coat breaks.
C The shoot grows upwards.
D The root grows downwards.
E The seed leaves start to shrivel

Which of the following shows the correct sequence for the growth of a seedling?

1) B → C → E → D → A
2) B → D → E → C → A
3) B → D → C → E → A
4) B → C → D → A → E

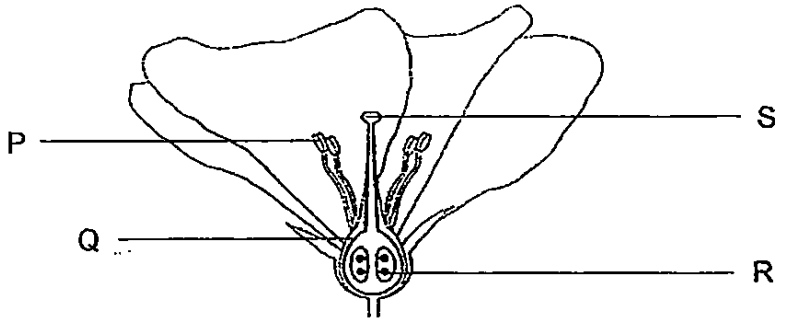
6 The graph below shows the number of days for each stage of the life cycle of organism Y.



At which stage of the life cycle is organism Y on the 18th day after the egg is laid?

1) egg
2) larva
3) pupa
4) adult

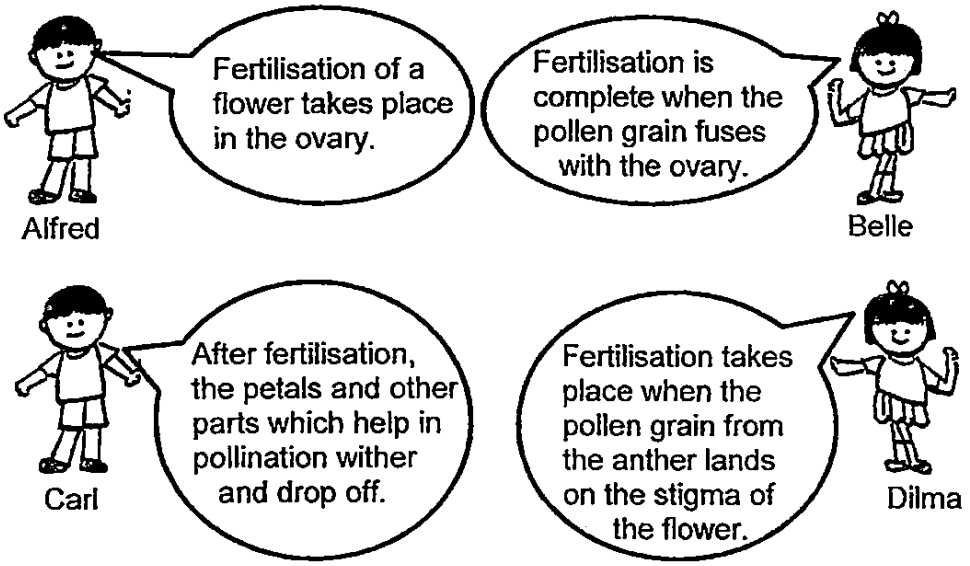
7 The diagram below shows the cross-section of a flower with the parts labelled P, Q, R and S.



Based on the diagram above, which part of the flower does not match its functions?

	Part	Function
(1)	P	Attracts pollinators
(2)	Q	Develops into a fruit
(3)	R	Develops into a seed
(4)	S	Receives pollen grains

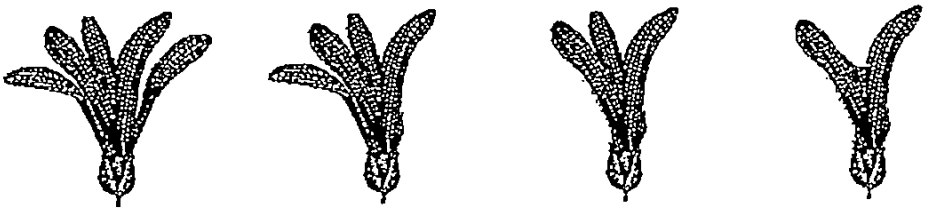
8 Four pupils made some statements about fertilisation.



Which of the pupils made a correct statement about fertilisation?

1) Belle and Dilma only
2) Alfred and Carl only
3) Belle, Carl and Dilma only
4) Alfred, Carl and Dilma only

9 Amin wanted to carry out an experiment to find out if the number of wing structure of a fruit affects how a plant could disperse its seeds further. He used four similar fruits of the same mass as shown below. Each of the four fruits was released from the same height.



5 wings 4 wings 3 wings 2 wings

Which of the following should Amin measure and compare in the experiment?

1) Size of each fruit

2) Mass of each fruit

3) Height from which each fruit was released

4) Time taken for each fruit to reach the ground

10 Mrs Lim filled four similar pots A, B, C and D with equal amounts of garden soil. She then placed some seedlings of the same height into each pot. The four pots were placed near the window where they could receive sunlight and air. The same amount of water was given to the four pots of seedlings daily. The table below shows the number of seedlings in each pot at the start of the experiment.

Pot	Number of seedlings
A	18
B	8
C	5
D	2

From the table above, which pot, A, B, C or D, would most likely produce the tallest adult plants after a week?

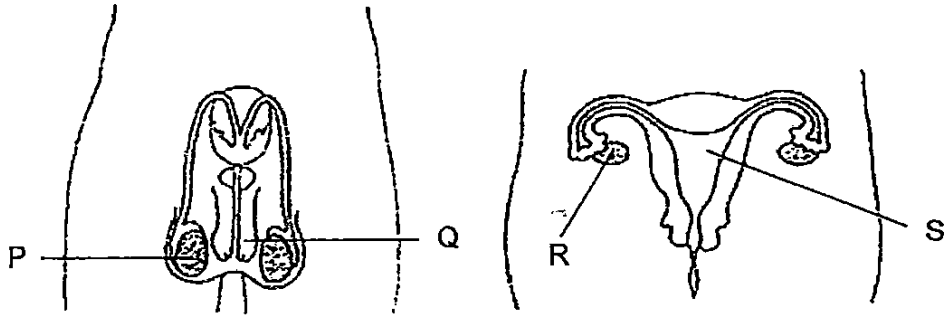
(1) Pot A

(2) Pot B

(3) Pot C

(4) Pot D

11 The diagrams below show the male and female human reproductive systems.



Which parts of the male and female reproductive systems shown above produce the sperms and eggs respectively?

(1) P and R only

(2) P and S only

(3) Q and R only

(4) Q and S only

12 The table below shows the characteristics of Leo and his parents, Mr and Mrs Wang.

	Characteristics			
	Earlobe	Thumb	Hair Length	Widow's Peak
Mr Wang	attached	hitchhiker's	short	Yes
Mrs Wang	detached	straight	long	No
Leo	detached	hitchhiker's	short	Yes

How many characteristics did Leo inherit from each of his parents?

He inherited _____.

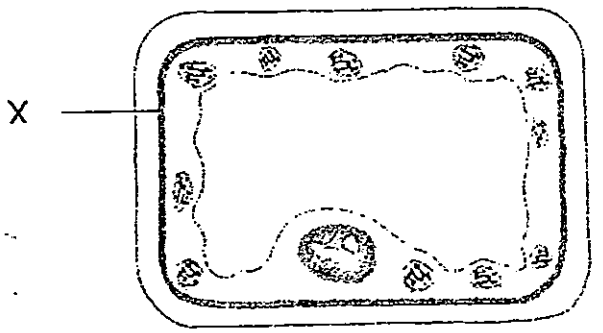
(1) one from his father and one from his mother

(2) two from his father and one from his mother

(3) one from his father and two from his mother

(4) three from his father and one from his mother

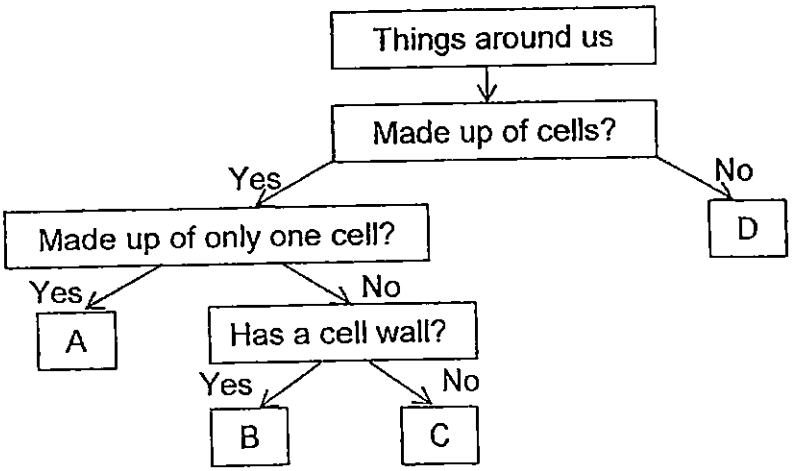
13 Which of the following functions is/are true of the part labelled X?



A Gives the cell a regular shape.
B Controls all the activities of the cell.
C Controls the movement of substances in and out of the cell.

1) A only
2) C only
3) A and C only
4) A, B and C

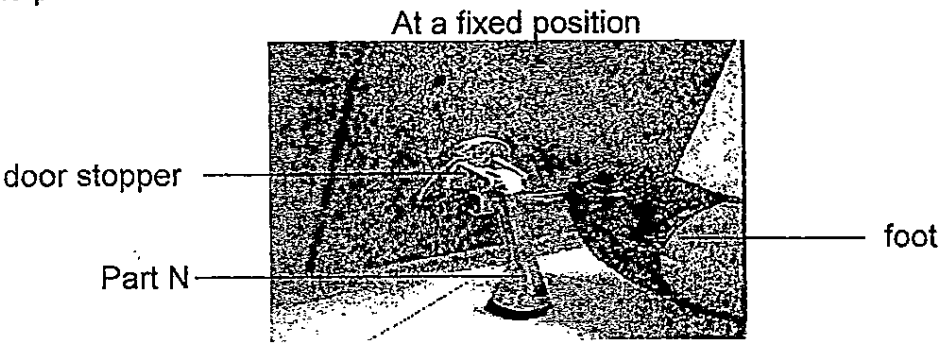
14 Study the chart below.



From the chart above, which of the following could be A, B, C and D?

	A	B	C	D
1)	bacteria	leaf cell	cheek cell	water
2)	steam	leaf cell	cheek cell	yeast
3)	bacteria	cheek cell	leaf cell	steam
4)	yeast	cheek cell	leaf cell	water

15 The diagram below shows a door stopper. A door stopper is an object which is used to keep a door in a fixed position. One needs to step on it to push it down.



What are the properties of the material used to make part N?

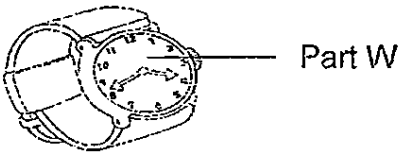
(1) hard and strong

(2) flexible and strong

(3) hard and waterproof

(4) flexible and waterproof

16 The diagram below shows a watch. The surface of the watch is labelled as part W.



Thiru conducted several tests on the four materials, P, Q, R and S, before he decided whether it is a suitable material to make part W. The results of his tests are shown in the table below.

Material	Properties		
	Can be bent easily	Can be scratched easily	Allows light to pass through
P	Yes	No	Yes
Q	Yes	Yes	Yes
R	No	Yes	No
S	No	No	Yes

Which material P, Q, R or S is most suitable for making the surface of the watch?

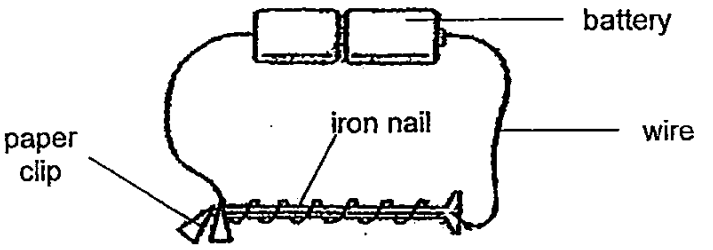
(1) P

(2) Q

(3) R

(4) S

17 The diagram below shows an electromagnet.



What could be done to the electromagnet in order for it to attract more paper clips?

A Add one more battery to the set-up.

B Remove one battery from the set-up.

C Replace the iron nail with a copper rod.

D Increase the number of turns of wire around the iron nail by ten turns.

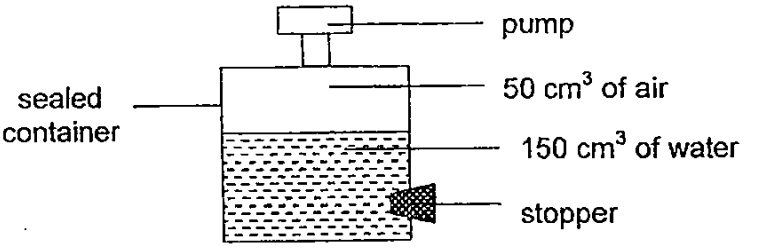
(1) A only

(2) A and D only

(3) B and C only

(4) B, C and D only

18 Mazlan conducts an experiment using the set-up as shown below.



20 cm^3 of water was removed when the stopper was released. He then used the pump to add 15 cm^3 of air into the sealed container.

What was the final volume of air in the sealed container?

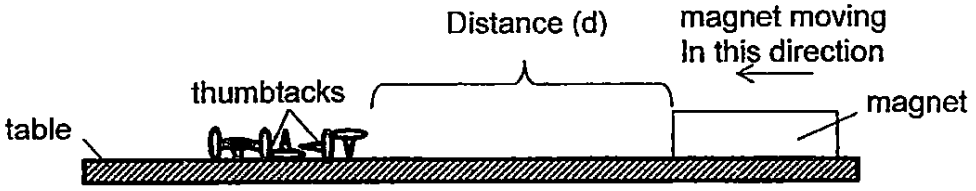
(1) 65 cm^3

(2) 70 cm^3

(3) 130 cm^3

(4) 145 cm^3

19 Josiah wanted to find out the strength of three magnets A, B and C which were of the same size. He slowly moved magnet A towards some thumbtacks which were placed on a table until the magnet attracted the first thumbtack from a distance (d).



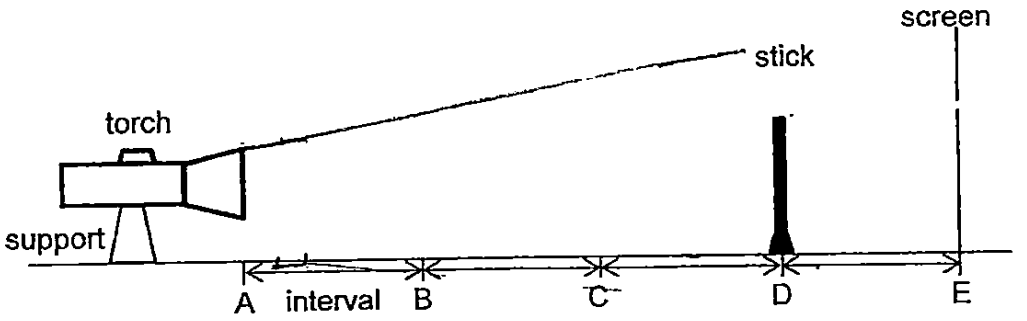
He repeated the procedure one more time and calculated the average distance for magnet A. The experiment was then repeated using magnets B and C. The results are shown in the table below.

	Distance d (cm)		
Magnet	First reading	second reading	Average reading
A	3.4	3.2	3.3
B	1.5	1.7	1.6
C	2.0	2.4	2.2

Which of the following shows the strength of magnets A, B and C from the strongest to the weakest?

	strongest	⟶	weakest
(1)	A	B	C
(2)	A	C	B
(3)	B	C	A
(4)	C	A	B

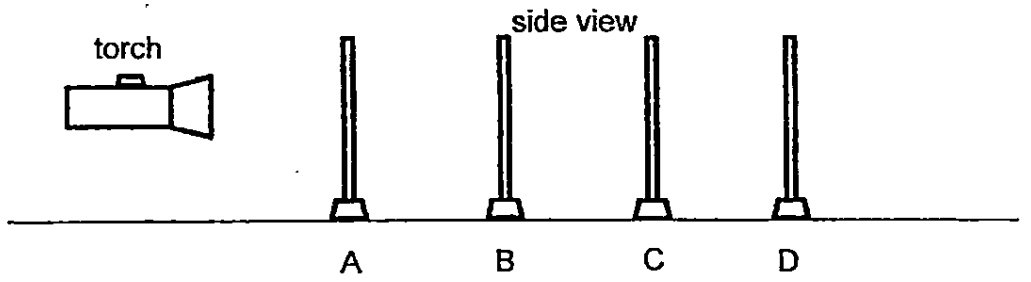
20 The diagram below shows a torch placed at position A. A stick was placed at position D and a screen was fixed at position E. The distance of each interval AB, BC, CD and DE was equal.



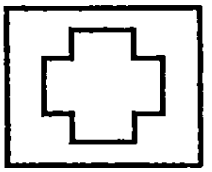
In order to obtain the biggest shadow on the screen, where must the torch and stick be placed?

	Position of torch	Position of stick
(1)	B	C
(2)	A	C
(3)	A	D
(4)	B	D

21 Mindy carried out the experiment as shown below in a dark room. She placed sheets A, B, C and D in a straight line.



A cross was cut out from sheet A as shown in the front view below.

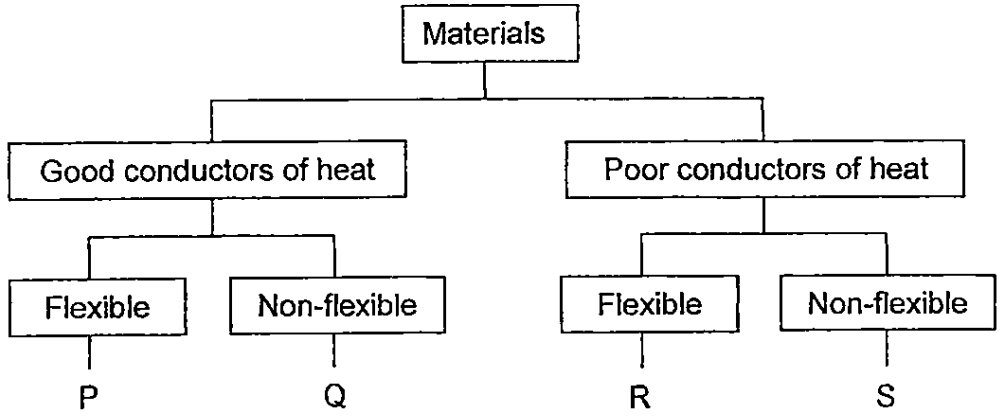


When the torch was switched on, a shape in the form of a cross was seen on sheet C only.

Which of the following correctly shows the ability of each sheet A, B, C and D to allow light to pass through?

	Allows most amount of light to pass through	Does not allow light to pass through	Not possible to tell
1)	A	C	B and D
2)	B	A and C	D
3)	A and B	C	D
4)	B and C	D	A

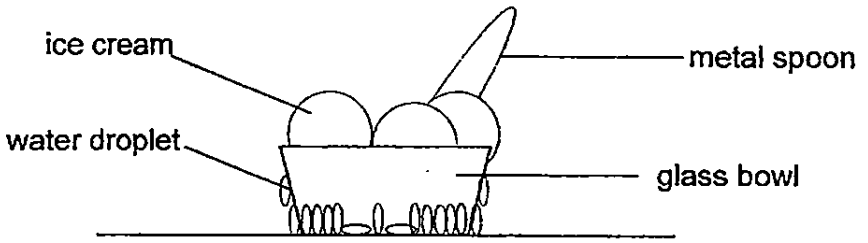
22 The classification chart below shows the properties of some materials.



Which one of the following are possible examples of objects, P, Q, R and S?

	P	Q	R	S
1)	steel pipe	silver wire	rubber hose	magnifying glass
2)	steel pipe	silver wire	cotton socks	ceramic cup
3)	aluminium foil	steel pipe	cotton socks	magnifying glass
4)	aluminium foil	rubber hose	ceramic cup	iron nail

23 Hansel left a glass bowl of ice cream with a metal spoon on the table in the dining room. After three minutes, he observed that there were tiny droplets of water on the outside of the glass bowl and the ice cream had started to melt.

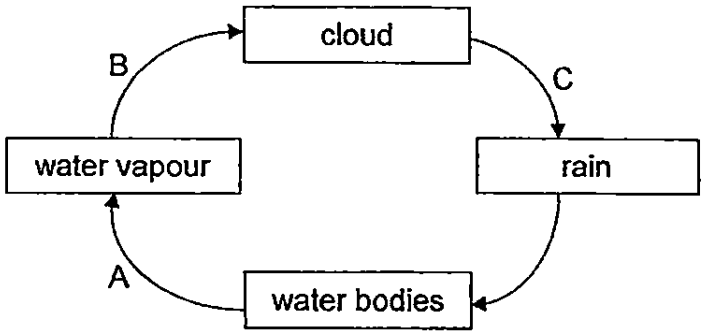


Which of the following statements explain his observations?

A The ice cream gained heat from the surroundings.
B The glass bowl condensed to form tiny water droplets.
C The metal spoon conducted heat from the surroundings to the ice cream.
D The water vapour in the surroundings lost heat to the cooler surface of the glass bowl.

1) A only
2) B and C only
3) B and D only
4) A, C and D only

24 The diagram below represents the water cycle.



Which of the following represents the processes correctly?

	Evaporation occurs at	Condensation occurs at
(1)	A	B
(2)	A	C
(3)	B	C
(4)	C	B

25 Substance Y is a solid at 40°C and a liquid at 200°C.

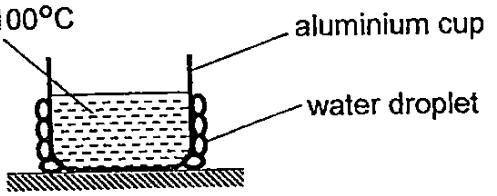
Which one of the following shows the possible melting point and boiling point of Substance Y?

	Melting point of Y (°C)	Boiling point of Y (°C)
(1)	30	100
(2)	30	300
(3)	50	100
(4)	50	300

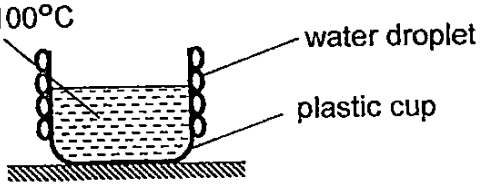
26 Brina set up an experiment to investigate the condensation of water vapour. The same amount of hot water at 100°C or cold water at 5°C was poured into similar cups made of either plastic or aluminium.

Which one of the following shows where water droplets would form after two minutes?

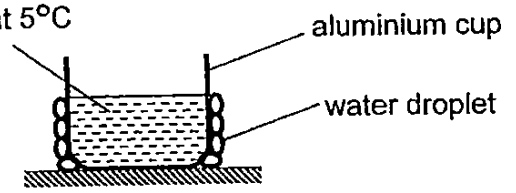
(1)



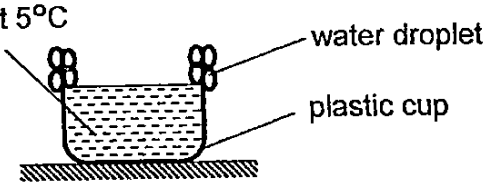
(2)



(3)



(4)



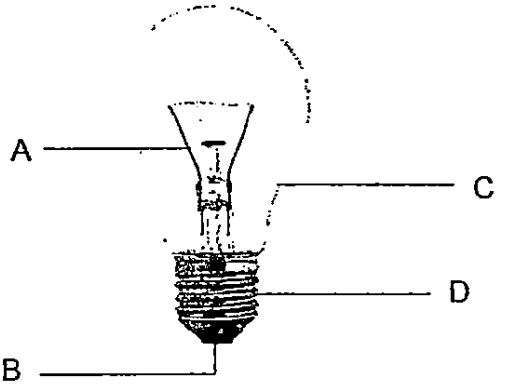
27 Eugene filled two similar beakers P and Q with 100 cm^3 of water. He placed beaker P in the open on a sunny and windy day. Beaker Q was placed in a dark room. Twenty-four hours later, he observed that the water levels in both beakers had decreased. He recorded the volume of water left in the table below.

Beakers	Volume of water at first (cm^3)	Volume of water at the end (cm^3)
P	100	70
Q	100	90

Which one of the following statements is not correct?

1) The rate of evaporation was higher in beaker P than Q.
2) Some of the water in beakers P and Q had evaporated.
3) The wind increased the rate of evaporation in beaker P.
4) Heat helped to increase the rate of evaporation in beaker Q.

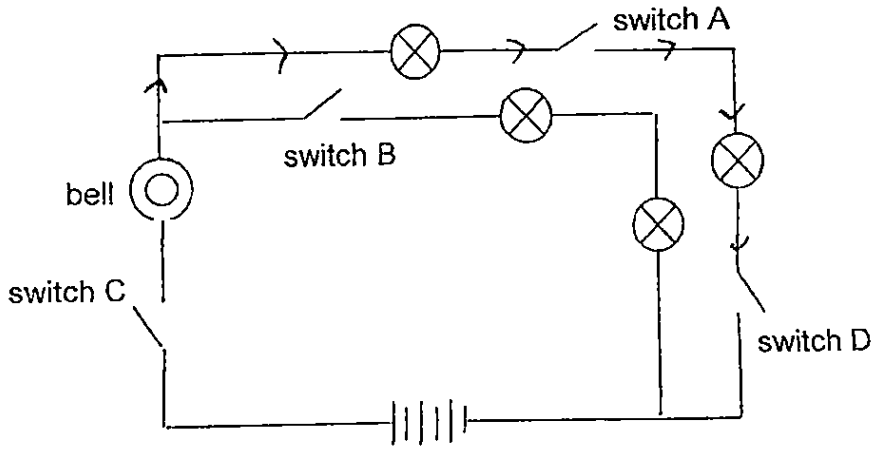
28 The diagram below shows a light bulb.



Which parts A, B, C and D of a light bulb are electrical conductors?

(1) A only
(2) B and C only
(3) B and D only
(4) A, B and D only

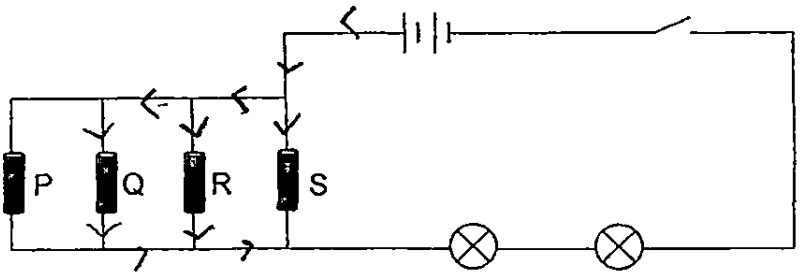
29 Study the circuit diagram below.



In order to ring the bell and light up any two bulbs, which switches should be closed?

(1) A and C only
(2) B and D only
(3) A, C and D only
(4) A, B, C and D

30 Jun Long wanted to find out whether four rods P, Q, R and S were electrical conductors or insulators. He used the circuit shown below.



The table below shows whether the bulbs lighted up when the switch was closed and certain rod(s) was/were removed.

Rod(s) removed from circuit	Did the bulbs light up?
P	Yes
Q and R	Yes
R and S	Yes
P, Q and R	No
P, R and S	No

Which one of the following is correct about rods P, Q, R and S?

	P	Q	R	S
1)	electrical insulator	electrical conductor	electrical insulator	electrical conductor
2)	electrical conductor	electrical insulator	electrical insulator	electrical insulator
3)	electrical insulator	electrical conductor	electrical conductor	electrical conductor
4)	electrical conductor	electrical insulator	electrical conductor	electrical insulator

End of Booklet A

CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT 1
2015
PRIMARY FIVE

SCIENCE

BOOKLET B

Name: _____ ( )

Class: Primary 5 - _____

Date: 15 May 2015

Parent's Signature: _____

Booklet A	60
Booklet B	40
Total	100

14 questions

40 marks

Total Time for Booklets A and B: 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

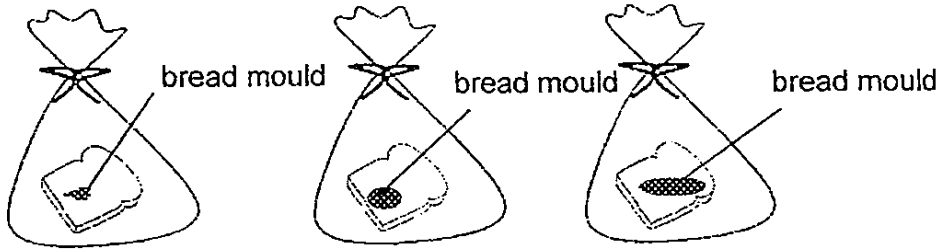
Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet.

This booklet consists of 15 printed pages, excluding the cover page.

For questions 31 to 44, write your answers in this booklet.
The number of marks available is shown in brackets [ ] at the end of each question or part question. (40 marks)

31 Tina wanted to find out if the amount of water affects the rate of reproduction of bread mould. She prepared three similar set-ups A, B and C and sprinkled 5ml, 10ml and 15ml of water on the bread in the set-ups A, B and C respectively.

The diagram below shows the results at the end of seven days.



Set-up A Set-up B Set-up C

(a) What was the variable she had changed in the above experiment? [1]

_____

(b) Which set-up had 5ml of water sprinkled on it? Give a reason to support your choice. [1]

_____

_____

(c) Based on the results of the experiment, what can Tina conclude about the relationship between the amount of water and the rate of reproduction of bread mould? [1]

_____

_____

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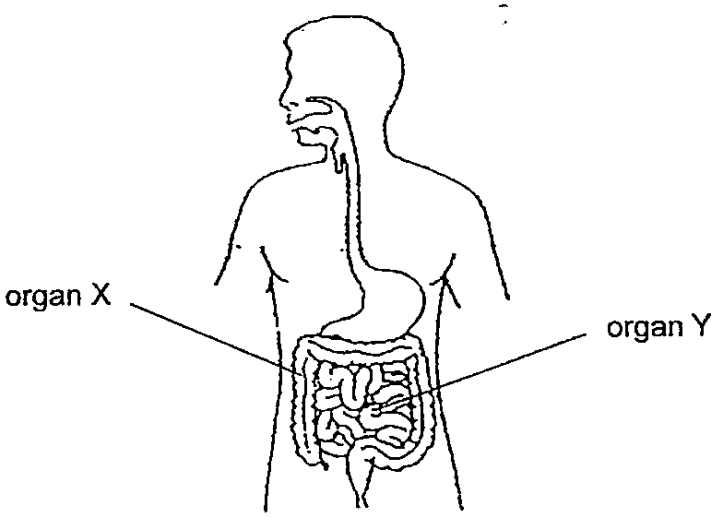
SCORE	/ 3

32 The diagram below shows the human digestive system.



(a) Identify organ X and organ Y. [1]

X : _____

Y : _____

(b) State the function of organ Y. [1]

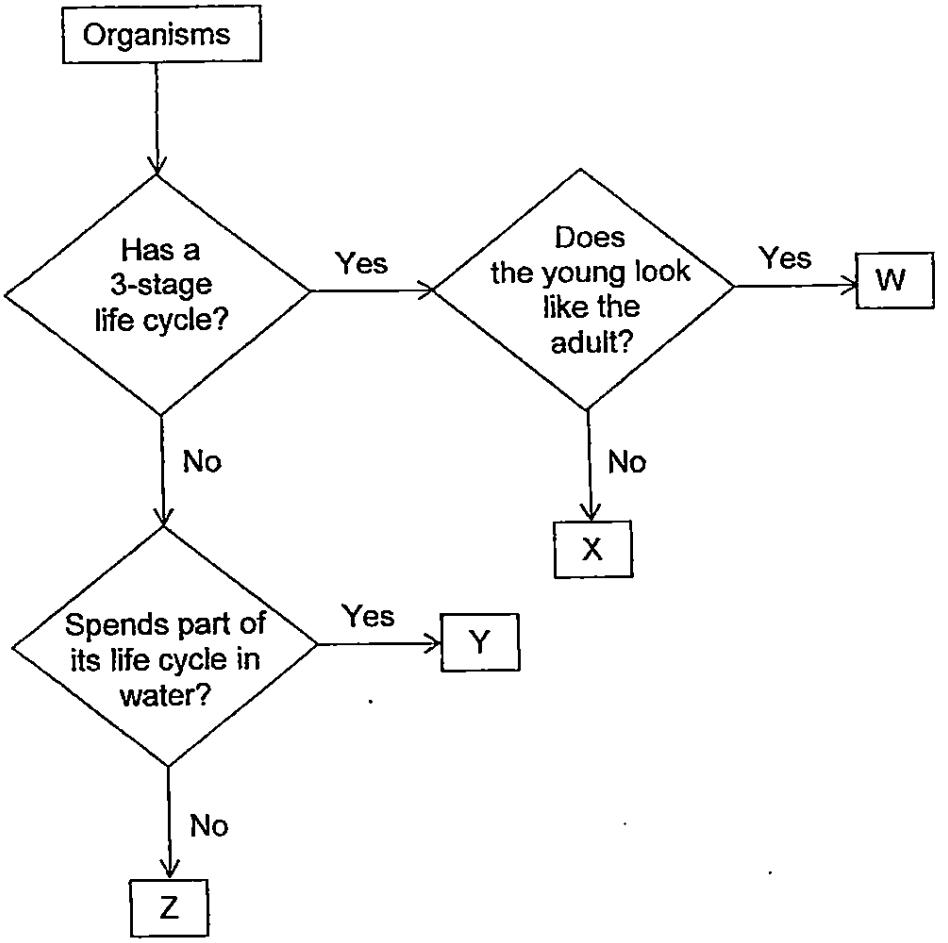
_____

_____

(Go on to the next page)

SCORE	2

33 Study the flow chart as shown below.



Match the letters W, X, Y and Z to the correct organisms.

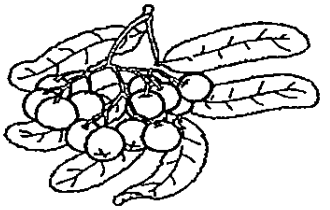
Organism	Letter
frog	
butterfly	
mosquito	
cockroach	

[2]

(Go on to the next page)

SCORE	. / 2

34 The picture below shows a type of fruit which organism X likes to eat. The fruit contains many small seeds.

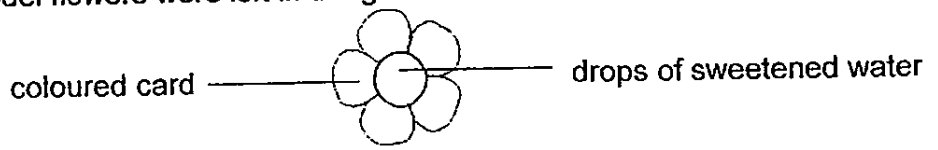


(a) Based on the information above, how does organism X help to disperse the seeds of this type of fruit? [1]

_____

_____

Jimu wanted to find out the colour of flowers which organism Y would prefer. He made model flowers using different-coloured cards. He put 8 drops of the same sweetened water in the centre of each model flower. The model flowers were left in the garden.



He counted the number of organism Y that visited the model flowers over 3 hours. The results were recorded in the table below.

Colour of the model flower	Number of organism Y visiting the model flower		
	7 – 8 am	8 – 9 am	9 – 10 am
red	9	6	2
green	16	12	8
purple	8	6	3

(b) Based on Jimu's results, which colour did organism Y prefer most? [1]

_____

(c) Shanon, Jimu's classmate, wanted to find out the relationship between the size of the model flowers and the number of organism Y visiting the model flowers.

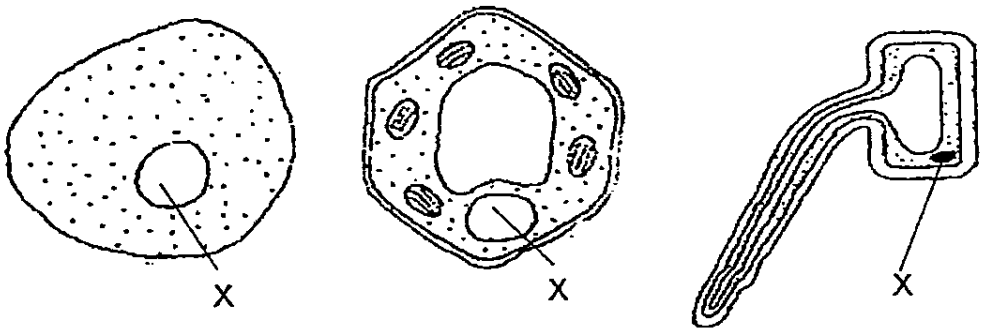
What changes to Jimu's experiment should Shanon make? [1½]

_____

(Go on to the next page)

SCORE	/ 3

35 The diagram below shows three different types of cells P, Q and S.



Cell P Cell Q Cell S

(a) State one function of the part labelled X in the above diagram. [1]

_____

_____

(b) Based on the diagram above, identify the plant cells

_____

(c) State one characteristic that allowed you to conclude your answer in (b). [1]

_____

_____

(Go on to the next page)

SCORE	3

36 Lynette was given an iron bar, a bar magnet and a bowl of iron filings as shown below. Her teacher asked her to pick up the iron filings from a bowl using the iron bar. She realised the iron bar could not pick up any iron filings.

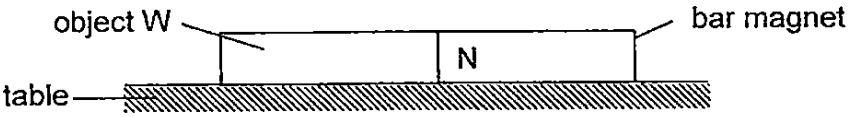
iron bar

bar magnet

a bowl of iron filings

(a) Explain how she could magnetise the iron bar using the bar magnet so that she could pick up the iron filings from the bowl. [2]

Next, her teacher gave her an object W. She told her to put the bar magnet and object W near to each other. She observed that object W was attracted to the bar magnet as shown in the diagram below.

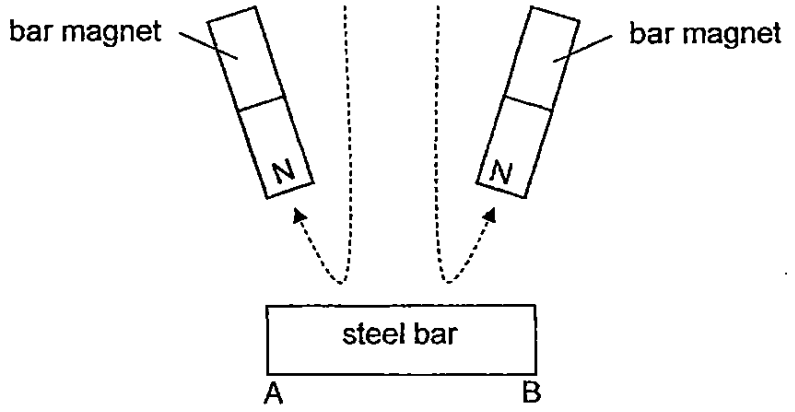


(b) Lynette concluded that object W was a magnet. Do you agree with her? Give a reason for your answer. [1]

(Go on to the next page)

SCORE	3

Lynette wanted to magnetise a steel bar AB using the north poles of two magnets as shown below.



(c) Give a reason why steel bar AB cannot be magnetised by Lynette's method. [1]

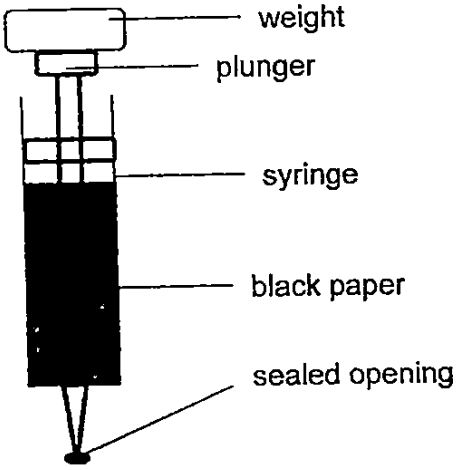
_____

_____

(Go on to the next page)

SCORE	1

37 Kumah covered a plastic syringe with a black piece of paper and filled it completely with matter Y as shown below. He sealed the opening of the syringe. He then put weights on the plunger of the syringe. For every weight he added, he observed the change in the volume of matter Y in the syringe.



He recorded the results in the table below.

Number of weights added (g)	Volume of matter Y (cm^3)
0	60
1	55
2	48
3	43
4	41
5	41
6	?

(a) Why must Kumar seal the opening of the syringe? [1]

_____

_____

(b) What is the volume of matter Y when Kuman added the 6^{th} weight on the plunger? [1]

_____

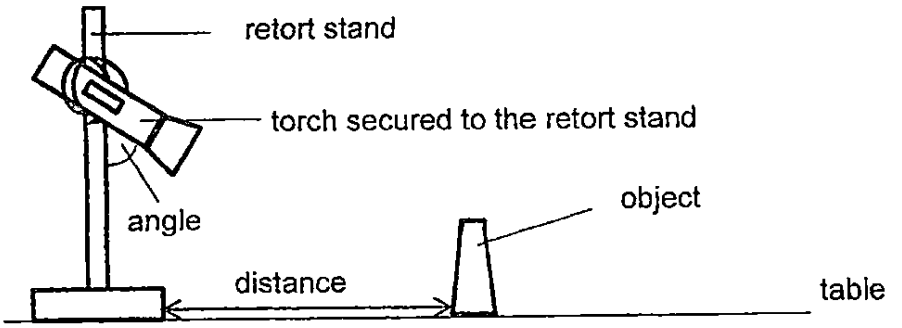
(c) Identify one property of matter Y based on the experiment. [1]

_____

(Go on to the next page)

SCORE	3

38 An experiment was carried out by Carrie as shown below.



In the experiment above, the angle at which the torch was shining at the object remained constant. Carrie measured the change in the length of the object's shadow on the table when the object was placed at different distances from the retort stand.

The table below shows the results of her experiment.

Distance of object from the retort stand (cm)	Length of shadow on the table (cm)		
	1st reading	2nd reading	Average reading
10	8	7	7.5
20	16	15	15.5
30	24	23	23.5

(a) What was she trying to find out from her experiment?

_____

(b) Based on the above experiment, explain how the shadow was formed on the table. [1]

_____

_____

(c) Why must Carrie ensure that the angle the torch was shining at the object be kept constant? [1]

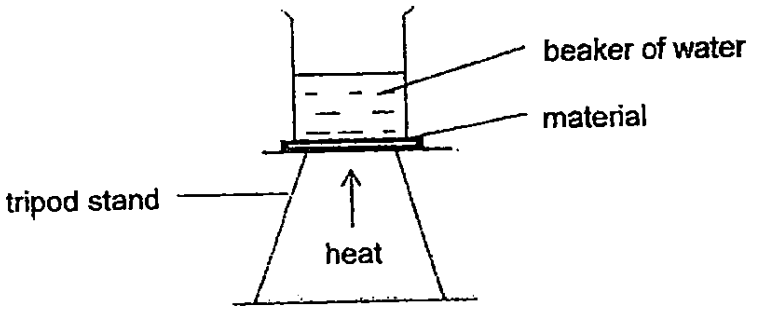
_____

_____

(Go on to the next page)

SCORE 3

39 Ricky wanted to find out how different materials conduct heat using the set-up as shown below.



He recorded the time taken for the water to boil when materials A, B and C were placed below the beaker of water. The results are shown in the table below.

Material	Volume of water at the start of the experiment (ml)	Time taken for the water to start boiling (min)
A	350	25
B	350	10
C	350	20

(a) From the table above, which material A, B or C should be used if we want to make cooking pots? [1]

_____

(b) Based on the data given give a reason for your answer in (a). [1]

_____

_____

(c) Why are materials that are poor conductors of heat used to make containers to keep food warm or drinks cold? [2]

_____

_____

_____

(Go on to the next page)

SCORE	4

40 Mrs Wee was in her garden. She hung her wet towels by folding them into halves as shown in diagram 1 below.

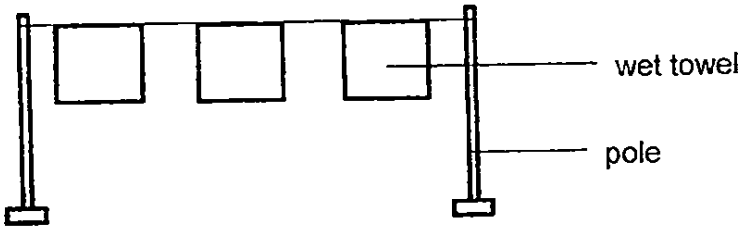


Diagram 1

Her daughter told her that the towels would dry faster if she hung them at full length as shown in diagram 2 below.

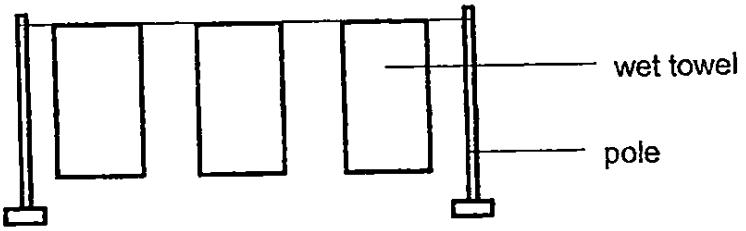


Diagram 2

Do you agree with her daughter? Explain your answer. [2]

_____

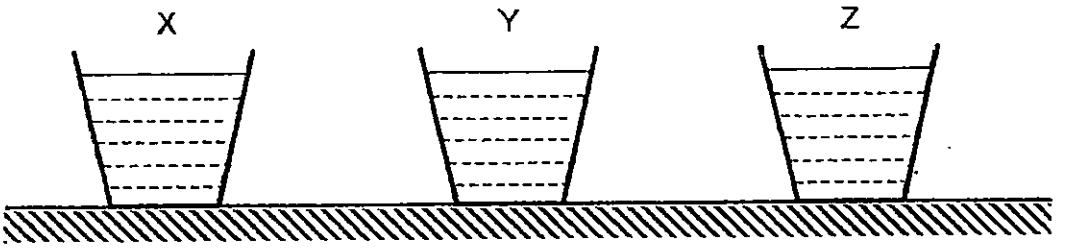
_____

_____

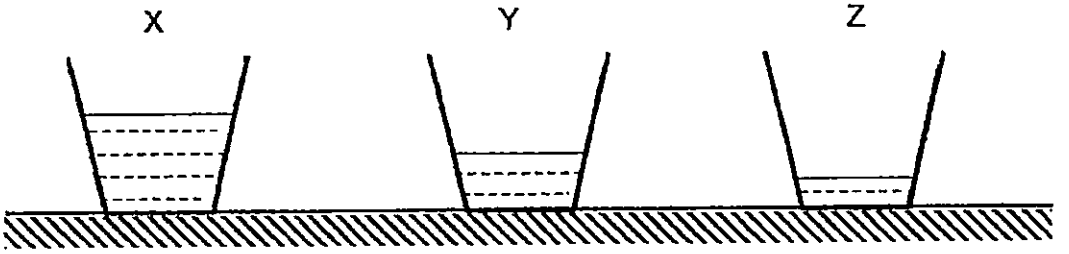
(Go on to the next page)

SCORE	/2

41 Caleb conducted an experiment to compare the rates of evaporation of liquids X, Y and Z. She poured 250ml of each liquid into three similar glass containers. He placed the containers in the garden for twenty-four hours as shown in the diagram below.



A day later, he checked on his set-ups. He drew the following observations in his Science Journal.



(a) Based on his observation, what could he infer about the rate of evaporation of the three types of liquid X, Y and Z? [1]

_____

_____

(b) Give a reason how each of the following actions helps to make his experiment a fair test. [2]

(i) using similar glass containers

_____

_____

(ii) placing all three glass containers at the same location

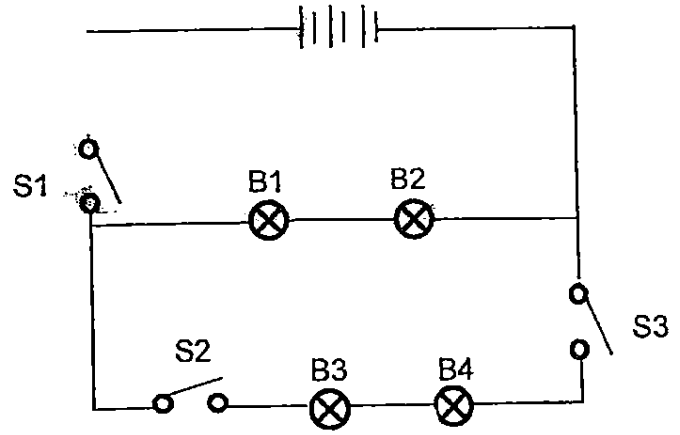
_____

_____

(Go on to the next page)

SCORE	3

42 The diagram below shows a circuit diagram. The switches in the circuit are labelled as S1, S2 and S3 while the bulbs are labelled as B1, B2, B3 and B4. The same type of bulbs, wires, switches and batteries are used.



(a) When switches S1 and S2 are closed, which bulb(s) will light up? [1]

_____

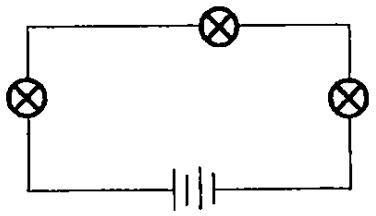
(b) What is the smallest number of bulbs that will remain lit when switches S2 and S3 are closed? [1]

_____

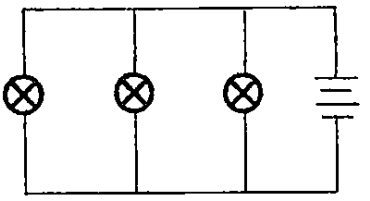
(Go on to the next page)

SCORE	2

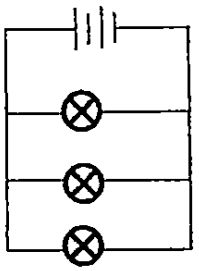
43 Selvi sets up some circuits as shown below using similar types of bulbs, batteries and wires.



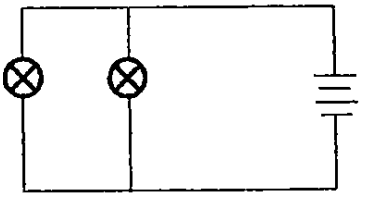
Circuit W



Circuit X



Circuit Y



Circuit Z

(a) Selvi discovers that all the bulbs in circuit W are very dim.

What is another disadvantage of arranging the bulbs in the way shown in circuit W? Explain your answer. [2]

_____

_____

_____

_____

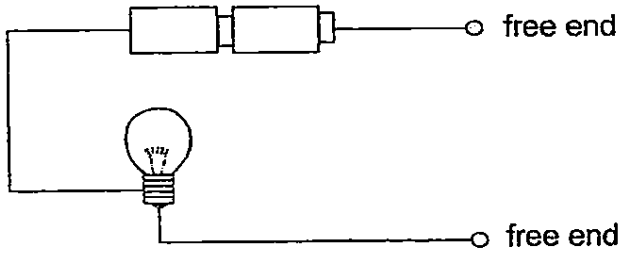
(b) From the diagrams above, which two circuits should she use if she wants to find out if the number of bulbs affects the brightness of the bulbs? [1]

Circuits _____ and _____

(Go on to the next page)

SCORE	/ 3

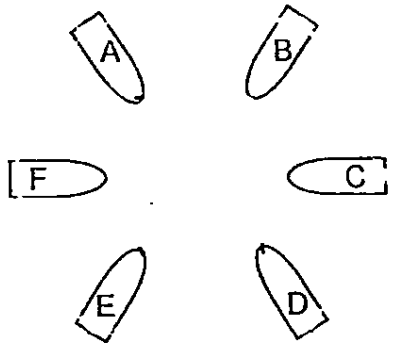
44 The diagram below shows a circuit tester.



The table below shows whether the bulb in a circuit tester lights up or not when the circuit tester is connected to two paper clips of a circuit card each time.

Paper clips connected to circuit tester	Does the bulb light up?
A and B	Yes
A and C	No
B and D	Yes
F and E	Yes
A and E	No
B and F	No

(a) Based on the results obtained in the table above, draw 3 lines to show the correct wire connections on the circuit card shown below. [2]



(b) Name another pair of paper clips (not mentioned in the above table) which would result in the bulb lighting up when connected. [1]

_____

End of Booklet B

SCORE	/ 3

LEVEL : PRIMARY 5
SCHOOL : CATHOLIC HIGH SCHOOL
SUBJECT : SCIENCE
TERM : SA1

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q9	Q 10
2	**3**	**4**	**3**	**3**	**3**	**1**	**2**	**4**	**1**
Q 11	Q 12	Q 13	Q 14	Q 15	Q16	Q17	Q18	Q19	Q20
1	**2**	**2**	**1**	**1**	**4**	**2**	**2**	**2**	**1**
Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
2	**3**	**4**	**1**	**4**	**3**	**4**	**4**	**3**	**4**

Q31a. The amount of water sprinkled on the bread.
Q31b. Set up A. The bread in Set up A has the least amount of bread mould growing on it.
Q31c. The higher the amount of water (given per day), the higher the rate of reproduction of bread mould.

Q32a. X : Large intestine Q32B: Y : small intestine
Q32b. To further break down food into simpler substances or to absorb digested food into the bloodstream.

Q33. X ,Z,Y,W

Q34a. Organism X eats the fruit and passes out the seeds of this type of fruit through their droppings.
Q34b. Green
Q34c. Use the same colour of all card but of different sizes.

Q35a. The nucleus contains genetic material that is passed from one generation to another.
Q35b. Cell Q and Cell S.
Q35c. Both Cells Q and S have a regular shape.

Q36a. Stroke the iron bar with one / same pole of the bar magnet repeatedly / several times and must be in the same direction.
Q36b. No. Object W could be a magnetic object thus it was attracted to the bar magnet.
Q36c. She used the same pole of both magnets to stroke steel bar AB. OR A magnet has two unlike poles.

Q37a. It is to ensure that matter Y will not escape through the opening.
Q37b. 41cm^3
Q37c. Matter Y does not have a definite volume.

Q38a. To find out how the distance of the object from the light source affects the length of the shadow cat on the table.
Q38b. The light from the torch was blocked by the object thus causing the shadow to form on the table.
Q38c. To ensure that any change in the length of the shadow cast on the table is only due to the change in the distance of object from retort stand.

Q39a. Material B.
Q39b. The waiter took the shortest time to start boiling as Material B gains heat the fastest.
Q39c. Materials that are poor conductors of heat lose and gain heat slowly, so if it used to keep food warm, it will lose heat slowly, and if it is to keep drinks cold, it will gain heat slowly.

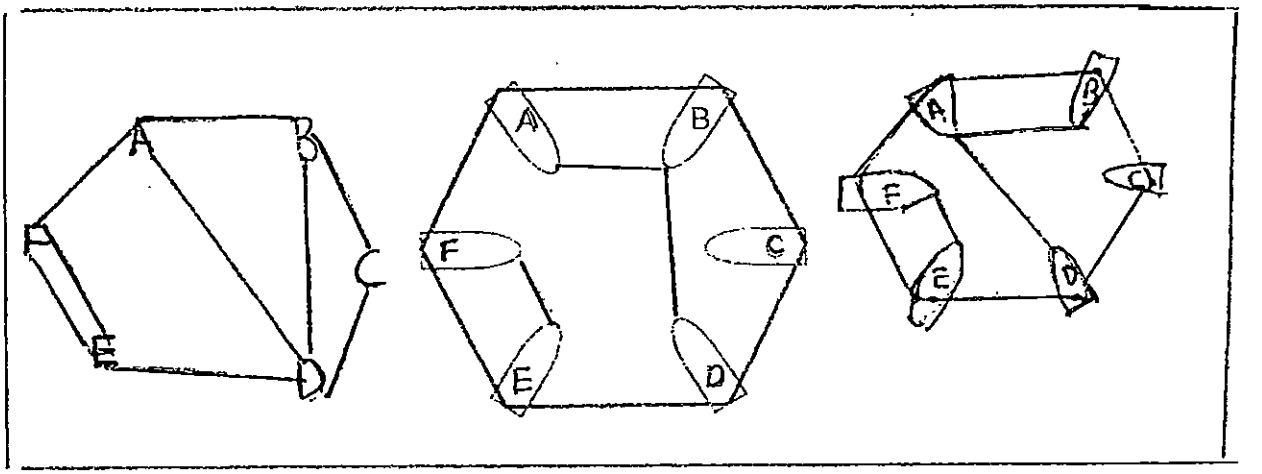
Q40. Yes. The wet towels in diagram 2 have a larger exposed surface area than the wet towels in diagram 1. Hence, the rate of evaporation would be higher. Larger exposed surface area helps the water in the towel to evaporate faster. Thus, the towels in diagram 2 dry faster.

Q41a. Liquid Z has the highest rate of evaporation, followed by Liquid Y then X.
Q41b. i) The exposed surface area of the container would be the same, as exposed surface area is one of the factors of evaporation.
Q41b. ii) The presence of wind would be the same, as the presence of wind is one of the factors of evaporation.

Q42a. B1 and B2
Q42b. Zero

Q43a. If one of the bulbs fuses, it will form an open circuit and electricity would not be able to flow, and all the bulbs will not light up.
Q43b. X and Z

Q44a. SEE PICTURE



Q44b. D and A

THE END